

Worksheet - Accuracy, Precision, Percent error,
Significant figures, Rounding

Name _____

Period _____

Date _____

1. Determine the number of significant figures in each measurement.

- a. 340,438 g _____
- b. 87,000 ms _____
- c. 4,080 kg _____
- d. 961,083,110 m _____
- e. 1.040 s _____
- f. 0.0483 m _____
- g. 0.2080 mL _____
- h. 0.0000481 g _____

2. Round the following numbers to three significant figures.

- a. 0.0030850 km _____
- b. 3.0823 g _____
- c. 5808 mL _____
- d. 34.654 mg _____

3. Write each of the following in scientific notation.

- a. 0.005832 g _____
- b. 386,808 ms _____
- c. 0.0005800 km _____
- d. 2086 L _____

4. Use rounding rules when you complete the following.

- a. $34.3 \text{ m} + 35.8 \text{ m} + 33.7 \text{ m} =$ _____
- b. $0.056 \text{ kg} + 0.0783 \text{ kg} + 0.0323 \text{ kg} =$ _____
- c. $309.1 \text{ mL} + 158.02 \text{ mL} + 238.1 \text{ mL} =$ _____
- d. $1.03 \text{ mg} + 2.58 \text{ mg} + 4.385 \text{ mg} =$ _____
- e. $8.376 \text{ km} - 6.153 \text{ km} =$ _____
- f. $34.24 \text{ s} - 12.4 \text{ s} =$ _____
- g. $804.9 \text{ L} - 342.0 \text{ L} =$ _____
- h. $6.38 \times 10^2 \text{ m} - 1.57 \times 10^2 \text{ m} =$ _____

5. Complete the following calculations. Round off the answers to the correct number of significant figures.

- a. $34.3 \text{ cm} \times 12 \text{ cm} =$ _____
- b. $0.054 \text{ mm} \times 0.3804 \text{ mm} =$ _____
- c. $45.1 \text{ km} \times 13.4 \text{ km} =$ _____
- d. $45.5 \text{ g} / 15.5 \text{ mL} =$ _____
- e. $35.43 \text{ g} / 24.84 \text{ mL} =$ _____
- f. $0.0482 \text{ g} / 0.003146 \text{ mL} =$ _____